

**PP-9**

**Differential Performance of Predators on selective Prey**

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Prey-predator model is the key to assess performance of a predator against a prey. This model has always been in a tendency to exemplify the limits and delimits of these two towards each other. The interaction between prey and predator is also affected by the nearby environmental biotic and abiotic conditions. A prey suitable for a predator is not necessarily proves suitable for another predator. Vice-versa a predator performing better while feeding on a prey is also not necessarily proves its same performance for another prey. To test this hypothesis, present study included aphid (Homoptera: Aphididae) as prey species for two different Ladybird beetles (Coleoptera: Coccinellidae). The criterion to assess this hypothesis encompassed growth, development, survival rate, mortality and weight of adults. Results revealed that the parameters in terms these parameters actually varied for both the predators drastically. Both the predators performed differentially from each other even when they were provided with same biotic and abiotic controlled laboratory conditions. Thus the current study conferred that nutritive contents obtained by a common prey can induce the predators to perform differentially including their overall fitness and vigor.

**Key words:** Prey, predator, aphid, ladybird beetle, development, survival.